

AMENDMENTS TO THE CLAIMS

Please amend the claims in the present application, without prejudice, as set forth herein:

1 (currently amended). A commutator for a motor comprising:

- a. at least one magnet formed from a pre-form mixture comprising a magnet powder and a thermo-set resin binder; and
- b. a resin-containing commutator core comprising a thermo-set resin,

wherein the at least one magnet is chemically-bonded to the commutator core via inter-bonding of the ~~thermo-set-resins~~ in the at least one magnet and the core.

2. The commutator of claim 1, wherein the at least one magnet facilitates the collection of information regarding properties of the motor.

3 (canceled).

4 (previously presented). A sensing assembly comprising the commutator of claim 1 and a sensor.

5 (previously presented). The commutator of claim 37, wherein the metal comprises copper.

6 (canceled).

7 (canceled).

8 (previously presented). The commutator of claim 35, wherein at least one of the electrically-conductive segments comprises an inner surface and at least one anchor extending radially inwardly from the inner surface of the segment.

9 (canceled).

10 (previously presented). The commutator of claim 35, wherein the magnet comprises electrically non-conductive material.

11 (canceled).

12 (previously presented). The commutator of claim 35, wherein the magnetic powder comprises strontium ferrite.

13 (previously presented). The commutator of claim 35, wherein the magnetic powder comprises barium ferrite.

14 (canceled).

15 (canceled).

16 (canceled).

17 (previously presented). The commutator of claim 35, wherein the electrically-conductive commutator segments comprise a carbaceous material.

18 (canceled).

19 (original). The sensing assembly of claim 4, further comprising a magnetic sensor.

20 (original). The sensing assembly of claim 19, wherein the sensor comprises a variable reluctance sensor.

21 (original). The sensing assembly of claim 19, wherein the sensor comprises a Hall-Effect sensor.

22 (canceled).

23 (canceled).

24 (canceled).

25 (canceled).

26 (canceled).

27 (canceled).

28 (canceled).

29 (canceled).

30 (original). The commutator of claim 1, wherein the at least one magnet is a substantially continuous ring.

31 (original). The commutator of claim 35, wherein the at least one magnet is a substantially continuous ring.*

32 (canceled).

33 (canceled).

34 (canceled).

35 (currently amended). The commutator of claim 1, further comprising a plurality of electrically-conductive commutator segments, wherein the commutator core is positioned adjacent the segments and defines a central aperture and wherein the at least one magnet comprises magnetic powder.

36 (original). The commutator of claim 35, wherein the core is molded in contact with the at least one magnet.

37 (original). The commutator of claim 35, wherein the commutator segments comprise metal.

38 (original). The commutator of claim 35, wherein the commutator comprises a barrel and a face and wherein the electrically-conductive commutator segments are positioned on the barrel of the commutator and the at least one magnet is positioned on the face of the commutator.

39 (currently amended). A commutator comprising at least one magnet chemically-bonded to an electrically-insulating, resin-containing commutator core and further comprising a plurality of electrically-conductive commutator segments, wherein the electrically-insulating commutator core ~~comprises an electrically-insulating thermo-set resin~~ is positioned adjacent the segments and defines a central aperture and wherein the at least one magnet comprises magnetic powder and a thermo-set resin chemically bonded to the commutator core by inter-bonding of resins of the commutator core and magnet, wherein the commutator comprises a barrel and a face and wherein the electrically-conductive commutator segments are positioned on the face of the commutator and the at least one magnet is positioned on the barrel of the commutator.

Please add the following new dependent claims 40-44.

40 (new). The commutator of claim 1, wherein the resin-containing commutator core includes a phenolic material.

41 (new). The commutator of claim 1, wherein the at least one magnet is chemically bonded to the commutator core in connection with concurrent molding of the magnet and the commutator core.

42 (new). The commutator of claim 41, wherein the concurrent molding of the magnet and the commutator core affects inter-bonding of resins at an interface between the magnet and the commutator core.

43 (new). The commutator of claim 42, further comprising a mechanical interlocking of the magnet and the commutator core at the interface between the magnet and the commutator core.

44 (new). The commutator of claim 43, wherein the mechanical interlocking is effected by interlocking features.